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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,744	04/25/2001	Alex Ka Tim Poon	PA0253/11269.32	7374

7590 09/23/2004
STEVEN G. ROEDER
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5560 Chelsea Avenue
La Jolla, CA 92037

EXAMINER


BROWN, KHALED

ART UNIT PAPER NUMBER

2877

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/842,744	POON, ALEX KA TIM	
	Examiner	Art Unit	
	Khaled Brown	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45-70,94-123 and 136-142 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 45-49,66-70 and 110-123 is/are allowed.
- 6) ☒ Claim(s) 50-65,94-109,136-140 and 142 is/are rejected.
- 7) ☒ Claim(s) 141 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

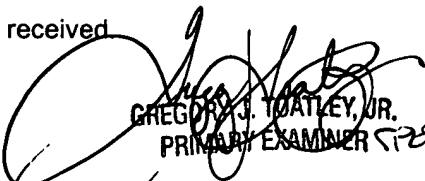
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received


GREGORY J. TOATLEY, JR.
PRIMARY EXAMINER 522877

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 50-65, 94-109, 136-140 and 142 are rejected under 35 U.S.C. 102(e) as being anticipated by Bisschops et al (US 6603130).

Re clms 50-53: Bisschops discloses an exposure apparatus comprising (Bisschops et al Fig 4): a stage that retains a device (14), a stage base that guides and supports the stage (13); and a chamber assembly that encircles the device (V), the chamber assembly including a fixed section (Bisschops et al 11), a moving section the moving section moving with the stage (Bisschops et al 12), a seal assembly (Bisschops et al 21) and a stage mover assembly (Bisschops et al 16).

Re clm 56: Bisschops discloses an exposure apparatus comprising (Bisschops et al Fig 4): a stage that retains a device (15); a chamber assembly that encircles the device (V), the chamber assembly including a fixed section (Bisschops et al 11), a moving section (Bisschops et al 12), at least a portion of the moving section being supported by the stage, and a seal assembly (Bisschops et al 21) and a stage base (Bisschops et al 16).

Re clm 57: a stage mover assembly (Bisschops et al PW).

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Re clms 60,61,62,63,94-99,101-105: Bisschops discloses an exposure apparatus comprising (Bisschops et al Fig 4): a stage that retains a device (15), a stage base that guides and supports the stage (16); a stage mover assembly (Bisschops et al PW) and a chamber assembly that encircles the device (V), the chamber assembly including a fixed section (Bisschops et al 11), a moving section the moving section moving with the stage (Bisschops et al 12), a seal assembly (Bisschops et al 21).

Re clms 54,55,58,59,64,65,108,109: device or wafer (Bisschops et al, W)

Re clms 100, 137: fluid bearing (Bisschops et al Col 8 line 3 "air" is a fluid)

Re clms 106,139: device table (Bisschops et al 14) and a table seal (13)

Re clms 107,140: allows for motion (Bisschops et al Col 7 lines 37-41)

Re clm 136: Bisschops discloses an exposure apparatus comprising (Bisschops et al Fig 4): a stage that retains a device (12); a stage mover assembly (Bisschops et al 15) a chamber assembly that encircles the device (V), the chamber assembly including a fixed section (Bisschops et al 11), a seal assembly (Bisschops et al 21) and a stage base (Bisschops et al 16).

Re clm 138: the stage is adjacent to the fixed section (12 is adjacent to 11)

Re clm 142: the seal assembly creates a vacuum between the fixed section and the stage (Col 6 lines 40-67)

[illegible]

Claims 45-49, 66-70 and 110-123 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record fails to disclose or suggest "the table seal....inhibiting the contaminants from the table mover assembly from circulating through the device chamber" in conjunction with the rest of the claimed subject matter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Claim 141 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose or suggest the limitation in this particular claim of "the stage mover assembly moves the device table relative to the moving section" in conjunction with the rest of the claimed subject matter.

Response to Arguments

Applicant's arguments filed 6-28-04 have been fully considered but they are not persuasive. The applicant argues that Bisschops et al does not disclose a table seal that seals the moving section to the device table, allows for motion of the device table relative to the moving section and that Bisschops et al. does not disclose a stage base positioned outside the chamber that supports and guides the stage, with the stage, in turn, supporting at least a portion of the moving section (Remarks p. 14 lines 1-13). However Bisschops et al. does disclose a table seal (13, which maintains vacuum conditions in chamber V) that seals the moving section (12) to the device table (14), allows for motion of the device table relative to the moving section (Col 7 lines 33-41, resting on moving section 12 is pillar 13 and resting on pillar 13 is fine stage 14. Therefore fine stage 14 does in fact move relative to moving section 14) and Bisschops et al. does disclose (in Fig 4) a stage base (16) positioned outside the chamber (V) that

supports and guides the stage (15), with the stage, in turn, supporting at least a portion of the moving section (12). For any other arguments see the above rejections.

Conclusion

The prior art previously made of record and not relied upon is considered pertinent to applicant's disclosure. Furukawa 5218896, Pollock 4726689, Tanaka 6496248, Bisschops et al 6445440 and Bisschops et al 6421112.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

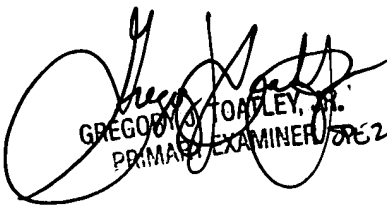
Note: No IDS was filed with the Amendment entered 6-28-04.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khaled Brown whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J Toatley Jr. can be reached on 571-272-2800 Ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KB
September 9, 2004


GREGORY J. TOATLEY, JR.
PRIMARY EXAMINER/2877